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10/613,905	07/04/2003	Michael Harville	200312252-2	7196
220.7	590 04/09/2007 CKARD COMPANY	EXAMINER		
P O BOX 27240	0, 3404 E. HARMON	BIAGINI, CHRISTOPHER D		
INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			ART UNIT	PAPER NUMBER
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SHORTENED STATUTORY	PERIOD OF RESPONSE	MAIL DATE	DELIVER'	Y MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)			
		10/613,905	HARVILLE ET AL.			
	Office Action Summary	Examiner	Art Unit			
	•	Christopher D. Biagini	2142			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DAISIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Depriod for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on <u>04 July 2003</u> .					
2a) <u></u> □	This action is FINAL . 2b)⊠ This action is non-final.					
3) 🗌	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Dispositi	ion of Claims					
5)□ 6)⊠ 7)□	Claim(s) 1-24 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) 1-24 is/are rejected. Claim(s) 1-24 is/are objected to. Claim(s) are subject to restriction and/or	vn from consideration.				
Application Papers						
10)⊠	The specification is objected to by the Examine The drawing(s) filed on 30 March 2004 is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	a)⊠ accepted or b)□ objected to drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority (under 35 U.S.C. § 119		•			
12) a)	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau See the attached detailed Office action for a list	s have been received. s have been received in Application ity documents have been receive n (PCT Rule 17.2(a)).	on No ed in this National Stage			
Attachmen						
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da				
7) Notice of Diansperson's Fatent Diawing Review (FTO/SB/08) 8) Notice of Informal Patent Application Paper No(s)/Mail Date 1/25/2005. 5) Notice of Informal Patent Application 6) Other:						

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DETAILED ACTION

Claim Objections

- 1. Claim 1 is objected to because of the following informalities: a comma missing on line 9 (between the words "components" and "enabling") renders the language of the claim grammatically incorrect. Appropriate correction is required.
- 2. Claims 10 and 22 are objected to because of the following informalities: the phrase "to enabling" on line 3 of each claim is grammatically incorrect. The Examiner recommends rewording the phrase to "to enable." Appropriate correction is required.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 11 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 5. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled

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in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "socket" in claims 11 and 23 is used by the claim to mean "a module for receiving and decompressing streaming media" (see discussion of "ears" on pp. 37-38 of Applicant's specification), while the accepted meaning is "an identifier for a particular service on a particular node on a network" (see the Microsoft Computer Dictionary, 5th Edition). The term is indefinite because the specification does not clearly redefine the term.

- 6. For the purposes of this examination, the limitation "input communication socket for decompressing said streaming media" will be interpreted to mean "a module for receiving and decompressing said streaming media."
- 7. Claims 12 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 8. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "socket" in claims 12 and 24 is used by the claim to mean "a module for compressing and sending streaming media" (see discussion of "ears" on pp.

37-38 of Applicant's specification), while the accepted meaning is "an identifier for a particular service on a particular node on a network" (see the Microsoft Computer Dictionary, 5th Edition). The term is indefinite because the specification does not clearly redefine the term.

9. For the purposes of this examination, the limitation "input communication socket of compressing said streaming media" will be interpreted to mean "a module for compressing and sending said streaming media."

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 11. Claims 1-2, 5-10, 13-14, and 17-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Lai et al. (US Pat. No. 6,407,680, hereinafter "Lai").
- 12. As to claim 1, Lai shows a method for managing a streaming media service, said method comprising: receiving a request for a streaming media service from a client (see step 502 in Fig. 5A and col. 14, lines 42-44), said streaming media service comprising a

plurality of media services components (comprising transcoding, transmitting, and streaming: see Fig. 2); determining which media service component of said plurality of media services components to assign to a service node of a plurality of service nodes (the nodes comprising machines in machine farm 216: see col. 15, lines 43-50) of a network (for example, a packet-switched computer network: see Fig. 1 and col. 8, lines 11-16); and informing each service node assigned to perform a media service component of said plurality of media services components (comprising assigning a task to a machine: see step 512 and col. 15, lines 38-43), enabling said streaming media service to be performed on a streaming media (see steps 516-524 in Fig. 5B and col. 16, lines 46-49).

13. As to claim 13, Lai shows a system for managing a streaming media service, said system comprising: a plurality of service nodes (comprising the machines in machine farm 216: see col. 15, lines 43-50) for performing a streaming media service on streaming media, said streaming media service comprising a plurality of media services components (comprising transcoding, transmitting, and streaming: see Fig. 2); a client for requesting said streaming media service (client 102); a manager (resource manager 208) coupled to said plurality of service nodes of a network and said client and for determining which service node to assign to perform each media service component of said plurality of media services components (comprising assigning a task to a machine: see step 512 and col. 15, lines 38-43); and a service builder (task manager 206) coupled to said manager and for communicating a list of said plurality of media

services components to said manager (the list comprising a set of tasks: see step 510 and col. 15, lines 27-38).

- 14. As to claims 2 and 14, Lai shows the limitations of claims 1 and 13 as applied above, and further shows wherein said streaming media is selected from video, audio, multimedia, and text (see Table 1 on columns 18-20).
- 15. As to claims 5 and 17, Lai shows the limitations of claims 1 and 13 as applied above, and further shows wherein said determining is based on load on said network (see col. 15, lines 50-53).
- 16. As to claims 6 and 18, Lai shows the limitations of claims 1 and 13 as applied above, and further shows wherein said determining is based on load on each service node of said plurality of service nodes (the load comprising CPU utilization: see col. 15, lines 43-50).
- 17. As to claims 7 and 19, Lai shows the limitations of claims 1 and 13 as applied above, and further shows wherein said determining is based on an existing streaming media service on said network (comprising using software residing on content provider client 104 instead of a transmitting server in machine farm 216: see col. 10, lines 44-49).

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18. As to claims 8 and 20, Lai shows the limitations of claims 1 and 13 as applied above, and further shows wherein said determining is based on a previously assigned media service component (comprising not assigning a transcoding server when one had previously been assigned for a particular set of media content: see col. 11, line 65 to col. 12, line 6).

- 19. As to claims 9 and 21, Lai shows the limitations of claims 1 and 13 as applied above, and further shows wherein said receiving said request is through a service portal (viewer web-server interface 202: see Fig. 2 and col. 14, lines 42-44).
- 20. As to claims 10 and 22, Lai shows the limitations of claims 1 and 13 as applied above, and further shows wherein each of said plurality of service nodes generates an input communication socket and an output communication socket to enable communication between assigned service nodes (inherently disclosed as being a necessary part of the process by which the servers receive and send data from other servers, as it is necessary to create input and output sockets to receive and send data over a network). See col. 10, lines 19-33 and col. 16, line 46 to col. 17, line 60.
- 21. Note that in addition to enabling communication between assigned service nodes, the input and output communication sockets enable retrieving media content and sending it to a viewer client. See col. 15, lines 30-35.

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Claim Rejections - 35 USC § 103

- 22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 23. Claims 3-4, 15-16, 11-12, and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lai (US Pat. No. 6,407,680) in view of Wei Tsang Ooi et al. ("Distributing Media Transformation Over Multiple Media Gateways," hereinafter "Ooi").
- 24. As to claims 3 and 15, Lai shows the limitations of claim 1 as applied above, but does not show wherein said determining is based on location of said client.
- 25. Ooi shows assigning a media service component to a service node based on the location of a client (comprising assigning a computation that increases bit-rate to a gateway near the receiver: see last paragraph of Introduction). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Lai with the determination process of Ooi in order to minimize bandwidth consumption.
- 26. As to claims 4 and 16, Lai shows the limitations of claim 1 as applied above, but does not show wherein said determining is based on bandwidth of said network. Ooi shows assigning a media service component to a service node based on bandwidth of a

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network (comprising using an entity to transform media streams into lower bit-rates for slow links: see first paragraph of Introduction). It would have been obvious to one of ordinary skill in the art to modify the invention of Lai with the determination process of Ooi in order to provide a better user experience to users of slow communication links.

- 27. As to claims 11 and 23, Lai shows the limitations of claims 10 and 22 as applied above, but does not show wherein said input communication socket is for decompressing said streaming media.
- 28. Ooi shows a group of assigned service nodes (comprising media gateways: see Fig. 1A), each of which has generated a module for receiving and decompressing streaming media (note that as described in 1.4, each gateway must have software to decompress a media stream). It would have been obvious to one of ordinary skill in the art to modify the invention of Lai with the media gateways and modules of Ooi in order to distribute the load of transcoding media among multiple devices. See paragraph 3 of section 1.1.
- 29. As to claims 12 and 24, Lai shows the limitations of claims 10 and 22 as applied above, but does not show wherein said input communication socket is for decompressing said streaming media.
- 30. Ooi shows a group of assigned service nodes (comprising media gateways: see Fig. 1A), each of which has generated a module for compressing and sending streaming media (note that as described in 1.4, each gateway must have software to

compress a media stream). It would have been obvious to one of ordinary skill in the art to modify the invention of Lai with the media gateways and modules of Ooi in order to distribute the load of transcoding media among multiple devices. See paragraph 3 of section 1.1.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher D. Biagini whose telephone number is (571) 272-9743. The examiner can normally be reached on M-R 7:30-5, 7:30-4 alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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